



Don't Get Caught In The Storm

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Most everyone at one time or another has been caught outdoors in an electrical storm. Whether you are cutting grass, camping, hiking, or working on your property, this can be a very frightening and dangerous time if you are not near a place of safety to wait out the storm. For any of you who may find yourself in that situation in the future, there are things you can do to limit your chances of being a lightning statistic.

Lightning

Lightning is an electrical discharge which results from a buildup of static electricity between the ground and the clouds, or between two clouds. It occurs with all thunderstorms, both in the storm area and out in front of the storm. Lightning is what causes those rumbles of thunder we hear off in the distance. If you can hear thunder before the storm, you are close enough to the storm to be struck by lightning.

Thunderstorms are most likely to develop on warm summer days and go through various stages of growth, development, and dissipation. On a sunny day,

as the sun heats the air, pockets of warmer air start to rise in the atmosphere. When this air reaches a certain level in the atmosphere, cumulus clouds start to form. Continued heating can cause these clouds to grow vertically upward in the

You can estimate the distance in miles between you and the lightning by counting the seconds between the flash and the sound of the thunder, then dividing by five.

atmosphere into towering clouds. These very tall cumulus clouds may be one of the first indications of a developing thunderstorm.

Lightning kills nearly 100 people every year in North America and causes

thousands more injuries. Although some victims are struck directly by the main lightning stroke, many more victims are struck as the current moves in and along the ground. Eighty-five percent of lightning victims are children and young men between the ages of 10 and 35 years who are engaged in recreational or work activities. Twenty percent of strike victims die, while seventy percent will suffer serious burns.

More Lightning Facts

- Lightning hits somewhere on the earth about 100 times every second.
- More people are killed by lightning than by any other kind of storm, including hurricanes and tornadoes.
- Lightning causes several hundred million dollars in damage to property and forests each year.
- Lightning results from the buildup and discharge of electrical energy between negatively-charged areas (bottom of the cloud) and positively-charged

areas (items on earth). It is static electricity on a huge scale.

- Your chance of being struck by lightning is estimated to be 1 in 600,000 each year.
- A lightning flash is estimated to carry 30,000 to 300,000 amps of electricity at 15 million to 125 million volts, for less than one second.
- The air near a flash is heated to 50,000 degrees F – five times hotter than the surface of the sun. The rapid heating and cooling of the air causes the shock wave we hear as thunder.
- Most lightning casualties occur in the summer months, during afternoon or early evening when people are caught outdoors.

Keeping Safe

No place is absolutely safe from lightning, although some places are much safer than others. Knowing these safe places and how to utilize them may prevent you or your family from being stranded in the storm with no place to go.

The safest location during lightning activity is a fully closed building with a roof, walls, and floor. Picnic shelters, sheds, carports, camping tents, or other partially open structures are not your safest bet. An enclosed building is safe because the wiring and plumbing, or outside telephone poles, help divert the electrical current from the flash. Typically the charge of electricity will travel through the wiring or plumbing and into the ground.

Safety Tips

If you cannot find shelter in an enclosed safe building, you can help protect yourself from being a victim of lightning by following these safety tips.

- Keep an eye on the sky . . . look for darkening skies, flashes of light, or increasing wind.
- If you are planning a day to work on your property, get an up-to-date weather forecast from your NOAA (National Oceanic and Atmospheric Administration) weather radio, or commercial radio or television station.
- As soon as you hear thunder, see lightning, or see dark threatening clouds, get to a safe location. If you can hear

thunder, you are close enough to the storm to be struck by lightning. Then wait 30 minutes after the last rumble of thunder before you leave the safe location.

- Lightning typically strikes the tallest object. Make yourself as small as possible by doing the “Lightning Safe Crouch” in the photograph below.
- Avoid any water, including water from faucets.
- Try to get into a house, large building, or vehicle (not a convertible). Avoid standing in small isolated sheds or other small structures.
- If you are stranded outdoors, seek shelter in a low area under a thick growth of small trees or shrubs. Remember – lightning usually strikes the tallest object. If you are in an open area, go to a place as low as possible such as a ravine or valley.

•If you are caught in a flat area – such as a level field – and you feel your hair standing on end, this is an indication that lightning is about to strike. Avoid contact with other people. If in a group, do not huddle together. Spread out at least 15 feet apart.

- Remove all metal objects from your body and clothes, including metal-framed backpacks, tools, etc.
- Stay away from metal objects such as antennas, electric wires, fences, and train tracks. The rails can carry lightning to you from some distance away.
- Avoid holding metal tools, fishing rods, guns, etc.
- Get off and away from machinery including lawn mowers, tractors, golf carts, ATVs, and bicycles.
- Have as little contact with the ground as possible. Do the “Lightning Safe Crouch.” (See photo.) ⚡

Sources:

<http://www.lightningsafety.noaa.gov/outdoors.htm>
http://www.usscouts.org/profbvr/lightning_safety/index.html
<http://www.safete.com/safetyarticles/weather/lightening.htm>



If you feel your skin tingle or your hair stand on end, do the “Lightning Safe Crouch.” Squat low to the ground on the balls of your feet and place your hands on your knees with your head between them. Make yourself the smallest target possible and minimize your contact with the ground. Stay in this position until the storm passes.